### **REMARKS**

An Office Action dated June 21, 2006, has been received and its contents carefully noted. Applicant acknowledges the Examiner's indication of allowable subject matter and that independent claims 100 and 103 would be allowable if rewritten or amended to overcome a rejection under 35 U.S.C. §112, 2<sup>nd</sup> paragraph. In order to advance prosecution, active claims 100 and 103 have been amended herein to overcome the formal rejection.

<u>Inventor's Declaration</u> - Accompanying this Amendment is a further Inventor's Declaration. It came to Applicant's attention yesterday that the Inventor Declaration filed with the Application on October 8, 2001, did not claim the benefit of priority of Applicant's three Provisional Applications. This was an inadvertent oversight which the attached Inventor's Declaration is submitted to overcome.

Request for Approval of Substitute Formal Drawings - Also accompanying this Amendment is a further Request for Approval of Substitute Formal Drawings to which is attached substitute Figures 1-13. Applicant filed a Request For Approval Of New Formal Drawings on April 6, 2006. Thirteen (13) sheets of proposed new drawings of Figures 1-13 were submitted. The Office Action dated June 21, 2006, indicated that those Figs. 1-13 were accepted. However, the proposed new Figs. 1-13 filed on April 6, 2006, were subsequently noted to have been inadvertently incorrectly numbered. Having noted the numbering error, Applicant now proposes to reinstate the substitute Figs. 1-13 previously filed on January 7, 2002, and attaches fresh copies. Since the Examiner had previously indicated that these drawings were acceptable, these copies of substitute Figures 1-13 should be accepted.

Second Request for Correction of The Scanned Application - Additionally accompanying this Amendment is a Second Request for Correction of The Scanned Application. In the Office Action dated June 21, 2006, the Examiner replied to Applicant's previous Request by taking the position that any errors in the issued Patent could be corrected by Certificate of Correction. Applicant submits that a Certificate of Correction would not correct the problem for the reasons given in this Second Request.

Entry of this Amendment After Final Rejection, further Inventor's Declaration, Second Request for Correction of The Scanned Application, and Request for Approval of Substitute Formal Drawings are requested on the grounds that they place the claims, specification, and drawings in condition for allowance without raising any new issues requiring further consideration with respect to prior art in view of the Examiner's indication of allowable subject matter. The amendments made to claims 100 and 103 herein are submitted to not broaden the claims in a way which raises new issues requiring further consideration with respect to prior art.

Claims 100-108, 110-137, 139, and 176-178 are active in this Application as being directed to an embodiment which was elected in responding to a restriction requirement and are all submitted to be in allowable condition for the reasons set forth in the following.

Claims 1-28, 48, 83, 109, 138, 159 and 175 have been cancelled. Claims 29-47, 49-82, 84-99, 140-158, and 160-174 are pending in this Application but stand withdrawn as having been non-elected. Upon allowance of elected claims 100-108, 110-137, 139, and 176-178, Applicant authorizes the Examiner to cancel withdrawn claims 29-47, 49-82, 84-99, 140-158, and 160-174 without prejudice to the filing of Divisional Applications in an Examiner's Amendment to place the Application in allowable condition.

### Substance Of A Brief First Interview:

Applicant expresses appreciation to Examiner Zeender for the telephonic interview of June 23, 2006. The purpose of this interview was clarification of the Examiner's position. The Examiner had formally rejected certain claim language in claims 100 and 103, namely, "subjective bias from humans is substantially eliminated", as seeming to contradict the human being inputs (user and provider info). The Examiner clarified his position by pointing out that the answers to the system-generated requests for additional information are given by humans so that our claims are not clear enough about this. Claims 100 and 103 have been amended with this position in mind.

## **Substance Of A Second Interview:**

Applicant expresses appreciation to Examiner Zeender for the telephonic interview of August 18, 2006. Proposed formal changes to claims 100 and 103 to delete the "so that" clause in its entirety were telefaxed to the Examiner prior to the personal interview. The following summarizes the substance of this interview as required.

- 1. While the proposed formal changes to claims 100 and 103 to delete the "so that" clause in its entirety in order to resolve the rejection and objection of record were discussed, no agreement was reached.
- 2. Counsel presented a further proposal to delete the last part of the "so that" clause, "confidence in the degree of matching is improved", but no agreement was reached. The Examiner suggested that Applicant consider quantifying the degree of matching.
- 3. Counsel presented another proposal to amend the claim to state, "... so that subjective bias from humans in generating the requests for additional information is substantially eliminated and confidence in the degree of matching is improved", but no agreement was reached. This latter

proposal was considered to make clear that bias from humans is eliminated in generating questions, not in the answers received.

- 4. The Examiner commented that, "wherein the matching system iteratively addresses problems comprised of: ...", was considered vague because the term "addresses" does not positively recite the limitations which follow, i.e., "(a) constructing..." etc. The Examiner suggested (a) changing "wherein the matching system iteratively addresses problems" to "wherein the iteratively convergent problem solving comprises:" and (b) putting the "output means language at the end of the claim. Applicant agreed to consider that Examiner's suggestion.
- 5. During the interview, the Examiner additionally drew Applicant's attention to Puram et al. (US 6,289,340) Col. 6, lines 16-31. The Examiner requested that Applicant present remarks distinguishing the active claims over this artificial intelligence embodiment. Applicant agreed to do so.

The rejection of claims 100-102, 107, 108, 110-137, 139, and 176-178 under 35 U.S.C. §112, second paragraph, is submitted obviated by the amendments made herein to independent claims 100 and 103.

The Examiner took the position that it was not clear in claims 100 and 103 how "subjective bias from humans is substantially eliminated" when lines 7 and 8 specifically claim "input means for inputting program code and user information, order information, and provider information".

The Examiner took the position that, in paragraph (f), "confidence in the degree of matching is improved" is not definite language in that the term "confidence" is dependent on human emotion and would vary.

Independent claims 100 and 103 have been amended for clarity by reciting, in pertinent part, "A matching system wherein a user places at least one order for at least one provider and a degree of matching between each order-provider pairing is computed and iteratively recomputed using responses to a cascading series of requests for additional information generated by the matching system in a fully automated way so that subjective bias from humans in generating the requests for additional information is substantially eliminated and confidence in the degree of matching is improved thereby, ...".

Inserting "in generating the requests for additional information" is submitted to make clear that the automation and substantial elimination of subjective bias from humans pertains to bias in generating the requests for additional information, not to user, order, and provider information which

are clearly inputted by humans. This language agrees with claims 100 and 103, paragraph (d), "... cyclically generating requests for additional information from at least one of the user, respective providers, and respective third parties as a cascading series of requests for additional information generated by the program code by referencing the knowledge base in a fully automated way, and cyclically receiving responses, ...". This is submitted to obviate the rejection.

Deletion of "confidence in" and addition of "thereby" is submitted to resolve the phrasing which the Examiner found indefinite. This wording is submitted to make clear that improvement in the degree of matching results from computing and recomputing "the degree of matching using responses to a cascading series of requests for additional information generated by the matching system in a fully automated way". This is submitted to obviate the rejection.

Finally, upon further scrutiny of claims 100 and 103, Applicant considered that the word "iteratively" had been used redundantly. For example, in the phrase, "a degree of matching between each order-provider pairing is computed and iteratively recomputed", "iteratively" is redundant in view of "recomputed" and therefore not needed.

These amendments made to claims 100 and 103 herein are submitted to not broaden the claims in a way which raises new issues requiring further consideration with respect to prior art. In view of this, the Examiner is respectfully requested to review and approve of Applicant's proposed changes.

# Distinctions of the Present Invention Over the Artificial Intelligence Embodiment of Puram et al.

The Examiner requested that Applicant present remarks distinguishing the active claims over the Artificial Intelligence (hereinafter "AI") embodiment of Puram et al. (US 6,289,340). There is only one paragraph in Puram et al. which mentions AI, see Col. 6, lines 16-31, which state:

"In an alternate embodiment, the system and method use <u>artificial intelligence</u> to query the employer about the employer's needs for a position. For example, if the employer indicates that a core strength for a position is in the area of graphical interface design, then the system <u>recognizes</u> that this project is in the early stages of development and proceeds to <u>probe further with questions</u> that are appropriate for such project, such as methodology being used, industry knowledge and related technologies. A <u>branching method is used</u> by the system to <u>access appropriate follow-up questions</u> in light of information provided in earlier steps by the employer. This artificial intelligence method offers advantages because it assists employers in defining what they need for a particular position. An employer might not have recognized all of the skills they needed for a position, until they are prompted by the system. [emphasis added]".

- 1. The paragraph quoted above discloses using AI to assist employers (users) to define the skills needed for a particular position (order). This is accomplished by (1) querying the employer for a description of skills needed to fill a position, (2) recognizing the stage of the project based on the employer's description, and (3) using a branching method to ask follow-up questions. There is no description in Puram et al., however, of how the queries are generated, how the system recognizes the stage, how the "follow-up" questions are generated or where the "follow-up" questions are stored. These details are left to the imagination of the artisan and, in any event, Puram et al. do not teach or suggest employing a knowledge base as is used in the present invention.
- 2. Puram et al. do not teach or disclose using a knowledge base which is separate from the user information and separate from program code as in Applicant's independent claims 100 and 103. As argued in previous responses, Fig. 1c and Col. 3, lines 31-39, of Puram et al. make it clear that the data receiving and interrogating process 68 is a process for gathering needs data and employer data so that Puram et al.'s "gathering and interrogating data from employers about positions to be filled 68" may not be fairly said to constitute a knowledge base containing both facts and rules for solving problems within the art-accepted definition of "knowledge base" already made of record in this Application:
  - "1. Computer Science. The part of an expert system that contains the facts and rules needed to solve problems.
  - 2. A collection of facts and rules for problem solving."

As previously argued, moreover, neither data receiving and interrogating process 68, nor databases 65, nor matching and ranking program code 69 of Puram et al. amounts to a "knowledge base" which is separate from the user information and separate from program code as in independent claims 100 and 103.

- 3. There is no teaching or suggestion in Puram et al. of <u>extending use of AI</u> to assisting prospective employees (providers) to define and redefine their skills as in Applicant's independent claims 100 and 103.
- 4. There is thus no teaching or suggestion in Puram et al. of extending use of AI to misrepresentation detection of a prospective employee's (provider's) information as in Applicant's independent claim 103.
- 5. AI and "branching questions" put to the employer's needs in Puram et al. do not amount to an automatic recomputing of the degree of matching based upon a plurality of iterative information-gathering steps, such as an interview or reference check, where questions (i.e., requests for additional information) are generated in a fully automated way based on responses previously received.

(09/973,251)

- 6. Unlike the present invention as claimed, Puram et al. do not compute and recomputed a degree of matching between each order-provider pairing using responses to the cascading series of requests for additional information generated by the matching system in a fully automated way so that subjective bias from humans in generating the requests for additional information is substantially eliminated and the degree of matching is improved thereby. Thus, "branching questions ... to access follow-up questions" in Puram et al. may not be fairly said to amount to Applicant's "cascading series of questions" obtained by consulting a separate knowledge base.
- 7. Unlike the present invention as claimed, Puram et al. do not employ "iteratively convergent problem solving". Thus, AI and "branching questions" in Puram may not be fairly said to amount to "iteratively convergent problem solving" in which the system cyclically requests information and gathers answers to converge on an improved matching result.
- 8. In conclusion, Applicant submits that claims 100 and 103, and the claims depending there from, are <u>distinguishable</u> from the disclosure of Puram et al., as well as all of the prior art of record, in that the matching system of the minimizes subjective bias from human beings by generating automated requests for information: (1) in a plurality of information-gathering steps, (2) for iteratively convergent problem solving, and (3) by using knowledge base technology, i.e., stored "facts", e.g., actual questions, and "rules", e.g., the rules by which a response received leads to automated selection of further questions.

In view of the foregoing amendments and remarks, it is requested that the formal rejection of record be reconsidered and withdrawn, that claims 100-108, 110-137, 139, 176, and 178 as amended be allowed, that upon allowing claims 100-108, 110-137, 139, 176, and 178 as amended the Examiner proceed to cancel withdrawn claims 29-47, 49-82, 84-99, 140-158, and 160-174 in an Examiner's Amendment to place the claims and the Application in allowable condition, and that the Examiner find the Application to be in allowable condition.

Should the Examiner not find the Application to be in allowable condition or believe that a further conference would be of value in expediting the prosecution of the Application, Applicant requests that the Examiner telephone undersigned Counsel to discuss the case and afford Applicant an opportunity to submit any Supplemental Amendment that might advance prosecution and place the Application in allowable condition.

Should the Examiner not find the Application to be in allowable condition, Applicant then requests entry of this Amendment After Final Rejection, reconsideration and withdrawal of the finality of the Office Action dated June 21, 2006, and issuance of a further Office Action on the grounds that (09/973,251)

the Office Action of June 21, 2006 did not reject the claims over any prior art and Applicant has made a bona fide effort to resolve the formal rejection of claims 100 and 103 without broadening the scope of the claims such that further consideration with respect to prior art would be necessary.

	Respectfully submitted,
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CERTIFICA	ΓΕ OF MAILING (37 CFR 1.8a)
I hereby certify that this paper (along with any referr States Postal Service on the date shown below with a Commissioner for Patents, P.O. Box 1450,	red to as being attached or enclosed) is being deposited with the United sufficient postage as first class mail in an envelope addressed to Alexandria, VA 22313-1450
	Ashley J. Wells (Name of Person Mailing Paper)
Date of Mailing: September 21, 2006	(Signature of Person Mailing Paper)



# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit: 3627

Primary Examiner: Mr. Florian M.(Ryan) Zeender

### In Re PATENT APPLICATION OF

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Appln. No.	:	09/973,251 )	REQUEST FOR CORRECTION OF
Conf. No.	:	6179	THE SCANNED APPLICATION
Filed	:	October 8, 2001 )	
For	:	AUTOMATED SYSTEM AND METHOD  FOR MANAGING A PROCESS FOR  THE SHOPPING AND SELECTION OF  HUMAN ENTITIES  )	
Atty. Dkt.	:	SCIUK-0001	September 21, 2006

#### MAIL STOP AFTER FINAL

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### Dear Sir:

This Second Request for Correction of the Scanned Application accompanies the filing of an Amendment After Final Rejection.

The above-identified Application was published on May 15, 2003 as US 2003-0093322 A1. The Published Application contains formatting errors for all of the Tables and all of the Formulae. The formatting for the Tables and Formulae was lost when the Application was prepared for publication since the .pdf version of the Application as filed available on P.A.I.R. properly shows the Tables and Formulae. These formatting errors make the Published Application difficult to read and understand, and, should a Patent issue with these errors as is likely unless Applicant's request is granted, the issued Patent would similarly be difficult to read and understand.

As an example, Applicant respectfully requests that the Examiner compare the Table on page 62 of the Application as filed with the version of the Table in paragraph [0270] of the Published Application. Applicant submits that the Table in paragraph [0270] of the Published Application cannot be understood.

Since these formatting errors arose when the Application was prepared for publication, Applicant submits that the U.S. Patent and Trademark Office's contractor should be accountable for correcting such formatting errors prior to issuance of a Patent.

In the Office Action dated June 21, 2006, the Examiner replied to Applicant's previous Request by taking the position that any errors in the published Patent could be corrected by Certificate of Correction. While this is true, Applicant submits that this would be costly for Applicant because of the large number of Tables and Formulae needing correction. Moreover, this would not serve the public seeking to read and understand the Patent because the Patent, taken together with such a Certificate of Correction, would be very difficult to read and understand.

Applicant is desirous of efficiently correcting the scanned, i.e., electronic, version of this Application, but is not able to submit the Application as originally filed in electronic format on a CD because the original document has been lost due to a hard drive crash.

Applicant is seeking to place the Application in the best condition for allowance and is therefore again requesting correction. Applicant submits that the Office's contractor who prepared the Application for publication should be accountable for correcting such formatting errors so that they do not appear in the issued Patent.

Respectfully submitted,

Date: September 21, 2006

Reg. No. 29,847



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## **CERTIFICATE OF MAILING (37 CFR 1.8a)**

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Ashley J. Wells
(Name of Person Mailing Paper)

Date of Mailing:

September 21, 2006

(Signature of Person Mailing Paper)